

### Written Statement of

# Dr. Sandra Magnus Executive Director American Institute of Aeronautics and Astronautics Reston, Virginia

# Hearing of the United States Senate Committee Homeland Security and Governmental Affairs

### "Examining Conference and Travel Spending Across the Federal Government"

### January 14, 2014

Chairman Carper, Ranking Member Coburn and distinguished senators, I want to thank you for the opportunity to address a subject of great importance to the nation's professional science and technology community, as well as of pointed significance to our nation's economic and national security.

I respectfully request your consideration of changes to the guidance for and implementation requirements of Office of Management and Budget (OMB) Memorandum M-12-12 Section 2 regarding federal employee participation in conferences. The science and technology

community supports careful oversight of federal employee meeting and travel expenditures, and the need for fiscal responsibility and transparency in the use of public funds. However, I believe that the way OMB Memorandum M-12-12 is being currently interpreted and implemented is having the unintentional consequence of restricting the open exchange of ideas among scientists, engineers, and technologists, thereby adversely affecting important national interests by throttling back on our nation's "innovation engine."

Permitting federal employees to participate in professional meetings allows them to interact appropriately with their colleagues from other agencies, our military science directorates, universities, and industry to help facilitate the intellectual exchanges that are central to their jobs, the technology transition process, and national interests. Each sector – industry, government, and academia – approaches problems and challenges from a different perspective. It is the creative synthesis of these various perspectives, methodologies, and motivations that drives American innovation. The absence of one sector in the collaborative process hinders the progress of science and technology on which the U.S. economy and our national security depend.

The purpose of scientific and engineering conferences is to foster and encourage these vital collaborative interactions. They serve as the focal point of scientific and engineering communication across segments and disciplines. The presentation of research, the casual conversations that occur while attending meetings, and the ability to expand one's horizons and examine problems in a new light result in the forging of unanticipated and important connections, not only in technical arenas, but also in policy and program areas. It is precisely this kind of unanticipated stimulation and collaboration that led to the commercial use of GPS satellites for telecommunications, automotive and maritime location assistance, and myriad other commercial applications of a technology originally developed for military purposes.

In addition, conferences allow young professionals to meet, interact with, and be mentored by senior researchers in their field. This gives them access to the wealth of knowledge and experience of veteran researchers, allows them to capitalize on "lessons learned" from the trial and error of previous programs, and provides continuity in the transfer of crucial institutional knowledge. Young engineers are able to build a support network that provides insight and counsel as they look to overcome challenges in their own work. Students, both undergraduate and graduate, also benefit from attending conferences with professionals from academia, government, and industry. They are introduced to new ideas and diverse methods they may not otherwise experience, giving them a broader perspective from which to pursue not only their studies but also their careers. Professional pipeline development like this also saves taxpayer money because professionals new to the industry do not have to relearn old lessons and reinvent successful processes.

As you know, Congress recently weighed in on M-12-12. In the recent consolidated appropriations bill funding the federal government for FY2014 (<u>HR 3547, Section 742 (e)</u>), Congress instructed the Executive Branch that "none of the funds... be used for travel and conference activities that are not in compliance with" M-12-12, providing a blanket endorsement of the restrictions created in the memorandum. Other legislative proposals related to M-12-12 include HR 313, which passed the House in August 2013; S.1347, which has been introduced in the Senate; and HR 2643, which was introduced in the House in July 2013.

The Congress obviously recognizes its responsibility to engage in the policy created by this OMB directive. However, despite being advised repeatedly by the scientific community, Congress has made no effort to clarify or ease those restrictions that impede federal researchers from participating in scientific and technical exchanges that enable these researchers to advance mission goals efficiently and effectively. Further this approach shows disregard for other Executive Branch directives that support federal researchers' participation in these exchanges.

From November 2012 through October 2013, our staff recorded 23 annual conferences and meetings hosted by various scientifically and technically focused organizations, including AIAA, that were either cancelled or significantly scaled back due directly to the travel and conference attendance restrictions placed on federal employees and their employing agencies by M-12-12. As this number was derived solely based on information volunteered by these organizations, it could well be vastly underestimating the technical symposia that have been impacted.

Since 2011, AIAA has experienced a significant drop in attendance to technical meetings that provide for this open exchange, and that allow federal employees the opportunity to share best practices and state-of-the-art research with their government and non-government peers. In that year, our total conference attendance was 8644, which included some 2446 federal employees on approved job-related participation. In 2012, those numbers fell to 7890 and 2281, respectively, and in 2013, the first complete year this directive affected, they fell further to 4897 including 1360 federal employees – a total decline of 44% federal employee attendance in the course of two years. One can conclude that this decline has also directly and significantly impacted the number of non-government researchers who attend and participate in these technical conferences, further reducing the effectiveness of

these exchanges, and stymying the rate of advancement of collaboratively-achieved research.

I ask that you act to prevent Memorandum M-12-12 from being applied in a way that hampers the legitimate and necessary interactions among scientific and technical researchers who work across government, industry, and academia - interactions that drive the advancement of technology that is vital to our economy and national security. Specifically, I ask that you affirm Congress's support of these open exchanges of information and establish legislative guidance that clarify exemptions and provide support for federal employee travel to conferences, seminars, and meetings where attendance promotes agency interests as well as the professional development and competency of government scientists, engineers, or other specialized experts. (This would be similar in spirit to the exemption from restrictions on federal employee participation in "widely attended gatherings" that is found in 5 CFR 2635.204(g)(2), and to the provision allowing government employees to serve in the governance of nonprofit organizations that is found in 5 CFR 2640.203(m)). Further, I request that Congress clarify that Memorandum M-12-12's definition of meetings does not cover meetings involving Federal Advisory Committees, the National Academies, standards-setting bodies, industry-government workshops and conferences, or official international engagements.

As written and as currently implemented, the directives in M-12-12 stand in stark contrast with the December 17, 2010 memorandum on "Scientific Integrity" by the director of the Office of Science and Technology Policy (OSTP), Dr. John P. Holdren. Under Part IV, "Professional Development of Government Scientists and Engineers," the OSTP memorandum calls for agencies to "[e]ncourage presentation of research findings at professional meetings" and "[a]llow full participation in professional or scholarly societies, committees, task forces, and other specialized bodies of professional societies...." This reflects the important role these meetings and organizations play in the professional development of the individual scientist or engineer, in the advancement of a given discipline, and of technology in general. Further, Dr. Holdren's memorandum endorses the notion that scientific integrity and progress are aided when data and research are subjected to appropriate "independent peer review by qualified experts" – which is the very foundation of professional societies and of presentations at professional technical conferences and symposia.

Because both Congress and the Administration have demonstrated an emphasis on scientific research and engineering advancement as critical functions of the federal government, I encourage you to consider how Administration policies and directives (as well as legislative

proposals such as those contained in HR 3547) can ensure appropriate oversight without inadvertently jeopardizing our technological advantages and the vitality of the American "innovation engine" and of the technical workforce that drives it forward.

I thank you for this opportunity to address the Congress on this policy. I welcome any questions you may have on the impacts the interpretation and implementation of these restrictions are having on the research community, and proposed guidance to minimize the unintended consequences this directive may have on the U.S. scientific and engineering enterprise.